

AMENDMENTS TO THE CLAIMS

Claims 1-34 (Canceled)

35. (Previously presented) An apparatus, comprising:

a capsule endoscope having a shape, wherein the shape has a contour, at least a portion of the contour is curved, and wherein the capsule endoscope includes:

a shell, wherein the shell includes one or more sensors, and wherein at least one of the one or more sensors is curved to shape to the contour, wherein the capsule endoscope further includes a substrate that includes the one or more sensors, wherein the substrate is formed sufficiently thin that it can be shaped to the contour, and wherein the capsule endoscope further includes:

a support having sufficient flexibility such that the support can be formed to the contour, wherein the substrate is coupled with the support such that the combination can be formed to the contour.

36. (Previously presented) The apparatus of Claim 35, wherein the support has electrical contact pads formed thereon; wherein the one or more sensors of the substrate have electrical contacts; wherein the electrical contacts of the substrate are electrically connected to the electrical contact pads of the support; and wherein electrical connections between the electrical contact pads of the support and the electrical contacts of the optical circuitry of the substrate are encapsulated with a protective covering.

37. (Previously presented) The apparatus of Claim 35, wherein the support is formed of a laminate of polyimide and copper layers; and wherein the substrate is comprised of a semiconductor substrate.

38. (Previously presented) The apparatus of Claim 35, wherein the capsule endoscope further includes a protective housing, and wherein the support and substrate are arranged inside of the protective housing.

39. (Previously presented) The apparatus of Claim 38, wherein the protective housing includes a portion of an optically transmissive surface.

Claims 40-44 (canceled)

Claim 45 (not entered)

46. (New) A device, comprising:

a capsule endoscope having a shape, wherein the shape has a contour, at least a portion of the contour is curved, and wherein the capsule endoscope includes:

one or more sensors, and wherein at least one of the one or more sensors includes a semiconductor material that is curved to shape to the contour.

47. (New) The device of Claim 46, wherein a sensor of the one or more sensors is at least one of: a temperature sensor, a pH sensor, an infrared sensor, an imaging sensor, or an active sensor.

48. (New) The device of Claim 46, wherein the capsule endoscope further includes a lens covering at least one of the one or more sensors.

49. (New) The device of Claim 46, wherein the one or more sensors are made of an organic semiconductor.

50. (New) The device of Claim 46, wherein the capsule endoscope includes a shell that is curved to the shape of the contour.

51. (New) The device of Claim 50, wherein the shell is distinct from the one or more sensors.

52. (New) The device of Claim 50, wherein the one or more sensors form a portion of the shell.

53. (New) The device of Claim 50, wherein the capsule endoscope further includes an outer shell that covers at least a portion of the shell.

54. (New) The device of Claim 50, wherein the capsule endoscope further includes a covering that is applied over at least a portion of the shell.

55. (New) The device of Claim 46, wherein the capsule endoscope further includes a substrate that includes the one or more sensors, wherein the substrate is formed sufficiently thin that it can be shaped to the contour.

56. (New) The device of Claim 55, wherein the substrate includes a silicon material.

57. (New) The device of Claim 55, wherein the substrate has a thickness of about 25 microns to about 125 microns.

58. (New) The device of Claim 55, further comprising an illuminator positioned on the shell.

59. (New) The device of Claim 46, wherein the capsule endoscope further includes a support having sufficient flexibility such that the support can be formed to the contour, wherein the substrate is coupled with the support such that the combination can be formed to the contour.

60. (New) The device of Claim 59, wherein the support has electrical contact pads formed thereon; wherein the one or more sensors of the substrate have electrical contacts; wherein the electrical contacts of the substrate are electrically connected to the electrical contact pads of the support; and wherein electrical connections between the electrical contact pads of the support and the electrical contacts of the optical circuitry of the substrate are encapsulated with a protective covering.

63. (New) The device of Claim 62, wherein the protective housing includes a portion of an optically transmissive surface.